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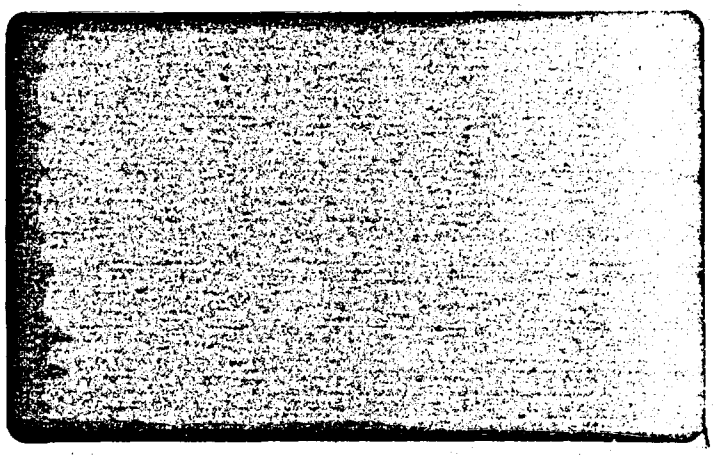

T E S III

TECHNICAL ENFORCEMENT SUPPORT AT HAZARDOUS WASTE SITES

U.S. EPA CONTRACT NO. 68-01-7331

CDM Federal Programs Corporation

AR300535

TRIP REPORT
BRODHEAD CREEK
SITE VISIT
MONROE COUNTY, PENNSYLVANIA

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460

Work Assignment No.	:	791
EPA Region	:	III
Facility I.D. No.	:	3P28
Contract No.	:	68-01-7331
CDM Federal Programs Corporation Document No.	:	T791-C03-RT-BUVT-2
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Date Prepared	:	April 8, 1988

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1.0 INTRODUCTION

CDM Federal Programs Corporation (FPC) has contracted with the U.S. Environmental Protection Agency (EPA) (Contract No. 68-01-7331) to provide enforcement support to EPA Region III during a remedial investigation/feasibility study (RI/FS) at the Pennsylvania Power and Light Company (PP&L), Brodhead Creek site in Stroudsburg, Pennsylvania. This work is to be conducted under Work Assignment (WA) No. 791 by Versar, Inc. This assignment includes (1) oversight of field activities, (2) collection of split samples, (3) evaluation of interim reports, and (4) review and evaluation of RI/FS reports prepared by PP&L.

The Brodhead Creek site is a former coal gasification power plant which was operated by the Citizens Gas and Electric Company from 1888 to 1940. In 1920, PP&L began acquiring portions of the site, and by 1960, owned the entire site.

Coal tar was disposed in recovery trenches along the eastern edge of the property, and waste residue was placed in an injection well located in the northwestern part of the property. In addition, prior to 1940, dye waste was disposed in an onsite, unlined lagoon by Holland Thread Company. In 1980, coal tar seepage was discovered at the base of a flood control levee located on the property. In April 1982, the site was listed on the National Priorities List (NPL).

Several interim remedial actions have been performed at the site since 1981. These interim remedial actions include the placement of filter fences, inverted dams, recovery well systems, and a slurry wall. In addition, the coal tar recovery trenches were excavated, and drummed contaminated waste materials were disposed of offsite.

PP&L has submitted a site operations plan (SOP) for the RI at the Brodhead Creek site. Final approval of the plan has not been given by Pennsylvania Department of Environmental Resources (PADER); therefore, only limited field activities have been conducted at the site. The activities that have been conducted include sampling of surface water and

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sediments, and measuring stream transects. PP&L has received PADER's and EPA's comments on the SOP, and is addressing them. It is not known when final approval of the SOP will be given.

2.0 SUMMARY OF SITE ACTIVITIES

On Tuesday, March 22, 1988, Patricia Watterson, geologist, and Enid Bulley, geochemist, of Versar, Inc., conducted a site reconnaissance of the Brodhead Creek site. Versar coordinated the site visit with the EPA primary contact, Patricia Tan; however, Ms. Tan was unable to attend the site visit. The purpose of the visit was to familiarize Versar personnel with the location, features, and conditions of the property (Figure 1). Features currently at the site include a flood control levee in the eastern portion of the site, a subsurface slurry wall constructed at the eastern base of the flood control levee, an injection well and recovery well cluster located in the central portion of the site, two run-off channels which transect the property, 25 ground-water monitoring wells, and a floodgate which discharges the contents of the run-off channels into Brodhead Creek.

Versar's tour of the site included identification of the existing ground-water monitoring wells, injection well, slurry wall, floodgate, and run-off channels. Former locations of the coal gasification plant and dye waste lagoon (Figure 2) were also identified in the west-central portion of the facility.

3.0 FINDINGS AND OBSERVATIONS

Versar observed the condition of existing ground-water monitoring wells and noted the following: (1) wells W-5, B-8, and B-14 did not have a cap, (2) the PVC casing for well B-21 was severely bent, with its cap ajar, and (3) most of the existing wells were labeled; however, one well located approximately 200 feet northwest of the former dye waste lagoon, and another well located approximately 200 feet west of the floodgate were not labeled.

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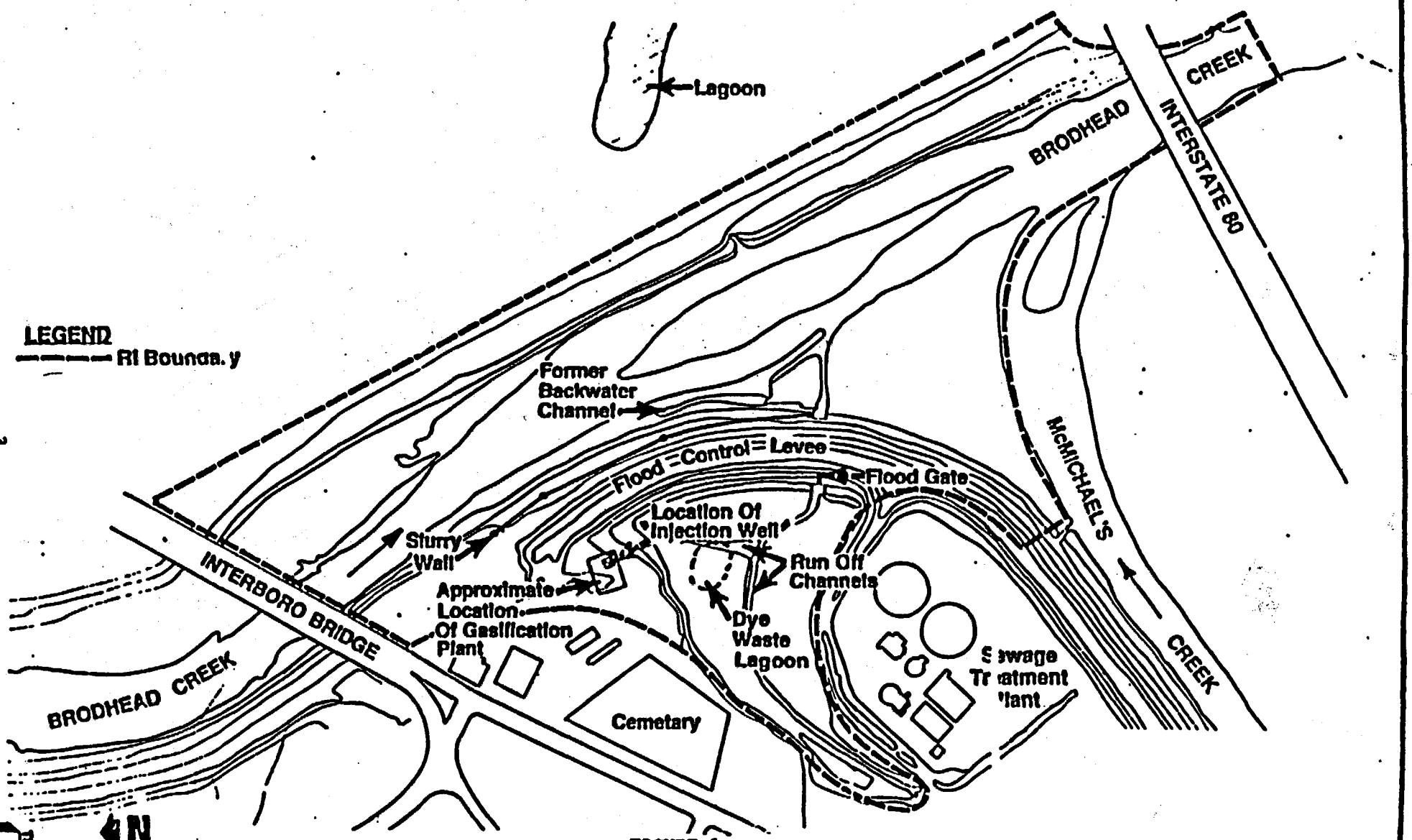

FIGURE 1
FACILITY MAP FOR
BRODHEAD CREEK SITE
STROUDSBURG, PENNSYLVANIA

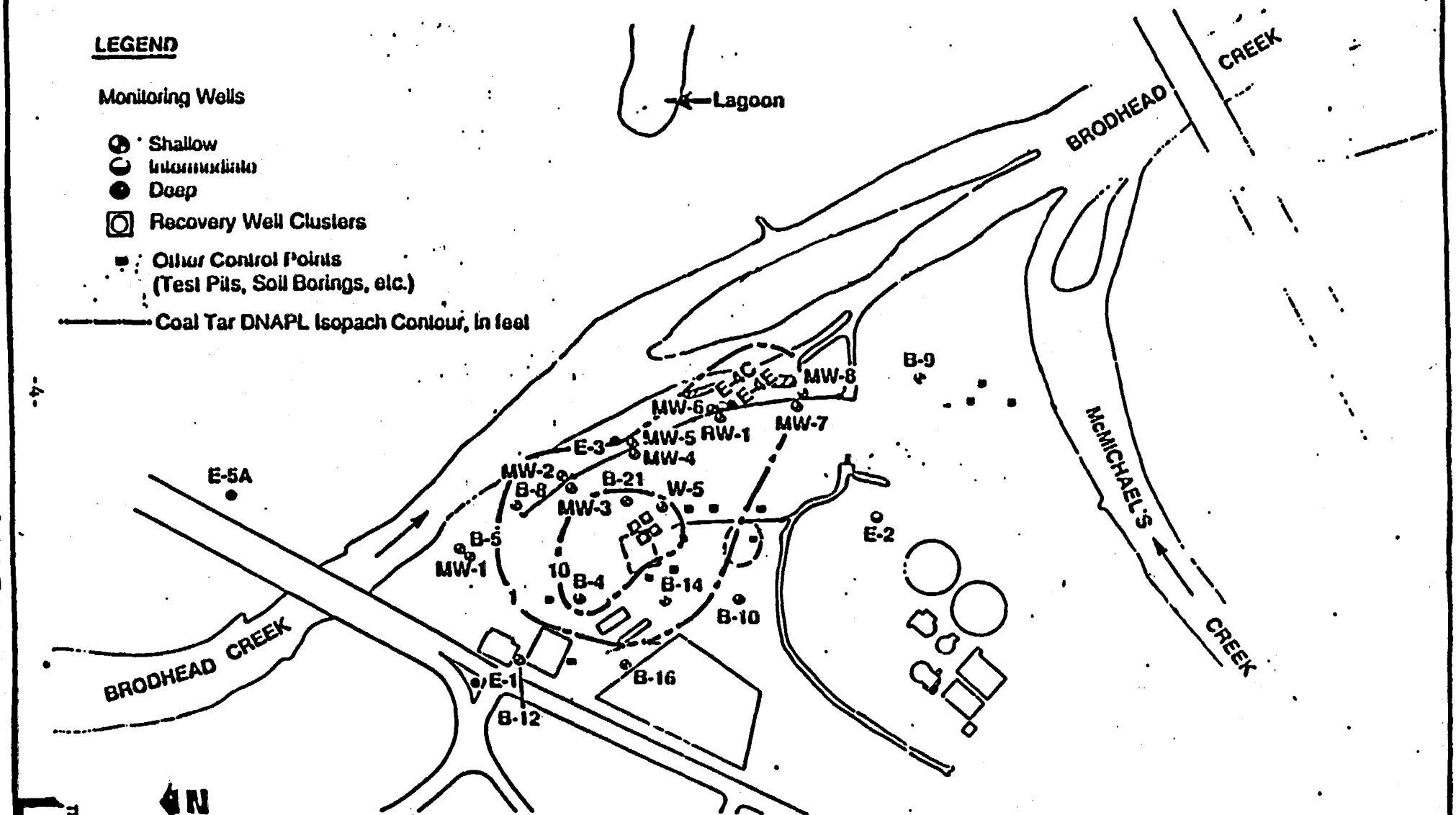

FIGURE 2
GROUND-WATER MONITORING WELLS AND RECOVERY WELLS MAP
FOR BRODHEAD CREEK SITE, STROUDSBURG, PENNSYLVANIA

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Versar also observed the relationships between Brodhead Creek, McMichaels Creek, the slurry wall, and the flood control levee. The stream stage of Brodhead Creek was currently low; however, there was evidence of a recent episode of high water. Versar observed water cutting laterally into the southern bank of Brodhead Creek in the location of the former backwater channel. This was evidenced by the steepness of the creek bank and the observed flow characteristics. Versar did not see any evidence of coal tar seepage along Brodhead Creek or the flood control levee.

The run-off channels, which transect the site, contained a milky white liquid. This same liquid was also observed at the base of the floodgate where the run-off was discharged into Brodhead Creek. In addition, the liquid being discharged from the floodgate was accompanied by a foam which floated on top of the water. The run-off channels also contained a large amount of algae. On two occasions unusual odors were noted onsite. Odors similar to burning petroleum product were noted near the floodgate and near the base of the flood control levee. Versar monitored the air for organic vapors and hydrogen cyanide during the site visit. Organic vapors were monitored with a photoionization detector and hydrogen cyanide was monitored using a hydrogen cyanide detector. No organic vapors or hydrogen cyanide were detected during the site visit.

Versar identified the former locations of the coal gasification plant and the dye waste lagoon using a site map. Both of these features no longer exist onsite. In the approximate area of the former gasification plant, Versar observed a small pile of rubble containing concrete and wood. It is not known if this is the remains of the plant. The dye waste lagoon has been backfilled and currently is overgrown by grass and bushes.

4.0 RECOMMENDATIONS

Versar recommends well maintenance on the existing wells to insure the integrity of the ground-water samples taken from these wells. Versar

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also emphasizes the need to study the potential risk of surface water contamination due to scouring of the creek bed during episodes of increased flow. The run-off channels should also be evaluated to determine the quality of the water contained in them.

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